

**UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF MICHIGAN**

<b>UNITED STATES OF AMERICA,</b>	)	
	)	
<b>Plaintiff,</b>	)	<b>Civil Action No. 2:21-cv-12928-DPH-JJCG</b>
	)	
<b>v.</b>	)	<b>Judge Denise Page Hood</b>
	)	<b>Magistrate Judge Jonathan J.C. Grey</b>
	)	
<b>DIESEL OPS LLC, <i>et al.</i>,</b>	)	<b>REDACTED VERSION OF</b>
	)	<b>DOCUMENT TO BE SEALED</b>
<b>Defendants.</b>	)	
	)	

**DECLARATION OF ETHAN CHATFIELD IN SUPPORT OF  
UNITED STATES' MOTION FOR DEFAULT JUDGMENT**

I, Ethan Chatfield, declare and state as follows:

1. I received a Bachelor of Science Degree from the University of Michigan School of Natural Resource and Environment in December 1997 and a Master of Science in Civil Engineering from the University of Colorado at Boulder in August 2000.

2. I am currently an environmental engineer employed by the U.S. Environmental Protection Agency Region 5 (EPA Region 5), Enforcement and Compliance Assurance Division. I have been an engineer with EPA Region 5 since March 2003.

3. EPA Region 5 is the regional office of EPA, headquartered in Chicago, that generally covers the states of Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

4. In August 2007, I became an environmental engineer with EPA Region 5's Air Enforcement and Compliance Assurance Branch (Air Enforcement Branch) of the Enforcement and Compliance Assurance Division (previously within the Air and Radiation Division) responsible for supporting enforcement actions brought by EPA Region 5 for compliance with requirements of the Clean Air Act ("CAA") and its implementing regulations. I still hold this position as of the date of this Declaration.

5. EPA requires all personnel who are authorized to conduct civil compliance inspections and field investigations to meet training requirements relating to major program or specific program compliance inspection/field investigation activity. I have been an EPA credentialed vehicle and engine inspector since July 2016. In addition to general inspector training requirements, I received program-specific hands-on inspection training with an experienced EPA inspector and annual training to maintain my inspector credentials. While working for EPA, I have conducted no less than 11 vehicle and engine inspections for Clean Air Act compliance. I have also trained new vehicle and engine inspectors on several occasions.

6. In the last five years, I developed over 30 enforcement cases involving products that bypass, defeat, or render inoperative emissions control systems in violation of the CAA (“Defeat Devices”) based, at least in part, on the results of inspections and information request analyses.

7. I am making the statements in this declaration based on my personal knowledge gained through my education and professional experience in the field of environmental engineering, conducting environmental compliance and enforcement inspections, and knowledge I have gained from reviewing documents specifically related to this case. If called upon to testify, I will testify as to the facts set forth herein.

**A. EPA’s Regulation of Vehicles Under the Clean Air Act**

8. The CAA regulates mobile sources, including motor vehicles, in order to protect human health and the environment by reducing harmful emissions of particulate matter (“PM”), carbon monoxide (“CO”), hydrocarbons (“HC”), nitrogen oxides (“NO<sub>x</sub>”), and other types of air pollution that contribute to the formation of ozone at ground level and smog.<sup>1</sup> The power to move a vehicle comes from burning fuel in an engine. CO, HC, and NO<sub>x</sub> are some of the major pollution by-products of

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<sup>1</sup> See <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#effects> (discussing the harmful effects of PM); <https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution#Effects> (discussing the harmful effects of CO); <https://www.epa.gov/no2-pollution/basic-information-about-no2#What%20is%20NO2> (discussing the harmful effects of NO<sub>2</sub> and NO<sub>x</sub>).

the combustion process. Carbon monoxide is a product of incomplete combustion and occurs when carbon in the fuel is partially oxidized rather than fully oxidized to carbon dioxide. Hydrocarbons emissions result when fuel molecules in the engine do not burn, or only partially burn. Under the high pressure and temperature conditions in an engine, nitrogen and oxygen atoms react to form various nitrogen oxides, collectively known as NO<sub>x</sub>.

9. The CAA defines a “motor vehicle” as “any self-propelled vehicle designed for transporting persons or property on a street or highway.” 42 U.S.C. § 7550(2); 40 C.F.R. § 85.1703.

10. The CAA has specific compliance provisions that establish emission standards and test procedures for each vehicle or engine type and year of manufacture. 40 C.F.R. Part 86 (emission standards for parts and components for diesel trucks).

11. Rather than mandate the use of a particular emission control technology, EPA utilizes a performance-based approach to emission standards. To comply with performance-based standards, the vehicle original equipment manufacturer (OEM) undertakes emission reduction technology assessment programs. The programs produce technological selections that enable vehicles to maintain emission performance throughout their regulatory useful life in actual use, and not just in a laboratory environment.

12. Manufacturers of new motor vehicles must receive a Certificate of Conformity (“COC”) from the EPA establishing that the vehicle and/or engine meet emissions standards before introducing the vehicle into commerce. Each COC applies to a specific engine family or vehicle test group and receives a unique identification code that also appears on the COC.

13. EPA maintains databases for collecting and storing the OEM’s complete application and publishes a subset of the information included in applications for certification submitted more than twelve years ago on the Agency’s Annual Certification Data for Vehicles, Engines, and Equipment webpage (<https://www.epa.gov/compliance-and-fuel-economy-data/annual-certification-data-vehicles-engines-and-equipment>). EPA’s Office of Transportation and Air Quality also has a web-based Document Index System the public can use to retrieve information about more recent vehicles.<sup>2</sup> The public can also find certification information in EPA’s Engines and Vehicles Compliance Information System.<sup>3</sup>

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<sup>2</sup> Document Index System can be found here:  
<https://iaspub.epa.gov/otaqpub/pubsearch.jsp?pubmodule=1>

<sup>3</sup> The Engines and Vehicles Compliance Information System can be found here:  
<https://www.epa.gov/ve-certification/how-register-engines-and-vehicles-compliance-information-system-ev-cis>.

## **B. Emission Control Technology**

14. Motor vehicle and engine manufacturers employ many devices and elements of design in order to meet emission standards. An “Element of Design” means “any control system (i.e., computer software, electronic control system, emission control system, computer logic), and/or control system calibrations, and/or the results of system interaction, and/or hardware items on a motor vehicle or motor vehicle engine.” 40 C.F.R. § 86.094-2.

15. OEMs install a variety of software and hardware elements of design and emission control systems in motor vehicles and motor vehicle engines to monitor and control emissions of pollutants in order to comply with the CAA and the regulations promulgated thereunder and to obtain a COC. I will refer to these elements of design and emission control systems as “Emissions-Related Elements of Design,” or as a single “Emissions-Related Element of Design.”

16. Defeat Devices designed for use on diesel vehicles and engines typically remove Emissions-Related Elements of Design, including EGR, catalysts, SCRs, and filters (defined below). Because these controls are designed to reduce emissions by up to 90 percent, their removal or disablement in a tampered vehicle

can result in that vehicle producing significantly more emissions than a vehicle with functioning Emissions-Related Elements of Design.<sup>4</sup>

17. There is a market for Defeat Devices because some consumers believe they can increase engine performance through bypassing Emissions-Related Elements of Design.

18. Motor vehicles are equipped with on-board computer systems (“Electronic Control Units” or “ECUs”) that run software that monitors and controls vehicle operations, including the operation of Emissions-Related Elements of Design.

19. Motor vehicles are also equipped with auxiliary emission control devices (“AECDS”) which are Emissions-Related Elements of Design that sense temperature, motive speed, engine revolutions per minute, transmission gear, or any

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<sup>4</sup> For example, EPA’s Verified Technology List also shows that certain DPFs reduce emissions of hydrocarbons and CO by 70 to 90 percent and DOCs may reduce hydrocarbons by 40 to 75 percent and carbon monoxide by 10 to 60 percent. See U.S. EPA, Technical Bulletin: Diesel Particulate Filter General Information, (May. 2010) (<https://www.epa.gov/sites/default/files/2016-03/documents/420f10029.pdf>); and U.S. EPA, Technical Bulletin: Diesel Oxidation Catalyst General Information (May 2010) (<https://www.epa.gov/sites/default/files/2016-03/documents/420f10031.pdf>). In addition, SCR systems can achieve NO<sub>x</sub> reductions up to 90 percent. See “About Clean Diesel, What is SCR?” Diesel Technology Forum, <https://www.dieselforum.org/about-clean-diesel/what-is-scr>.

other parameter for the purpose of activating, modulating, delaying, or deactivating the operation of any part of a motor vehicle's emission control system.

20. OEMs began installing Exhaust Gas Recirculation Systems ("EGR System") on vehicles in the 1970s. An EGR System is an Emissions-Related Element of Design that reduces NO<sub>x</sub> emissions produced by the high combustion temperatures generated by diesel engines. The EGR system recirculates a portion of engine exhaust gas back through the engine's cylinders to lower combustion temperatures and reduce NO<sub>x</sub> formation.

21. The EGR System includes, but is not limited to, the EGR cooler, throttle valve, other valves, piping, flanges and gaskets, as well as various other hardware, parts, sensors, subassemblies, AECDs, ECU software (calibrations) and other components that collectively constitute the system for implementing this emissions control strategy.

22. In addition to EGR Systems, OEMs typically install Diesel Particulate Filters ("DPFs"), Diesel Oxidation Catalysts ("DOCs"), Selective Catalytic Reduction ("SCR") Systems, and NO<sub>x</sub> Adsorption Catalysts ("NACs") in a vehicle's stock exhaust system. ECU Systems run calibrations to direct operations of the hardware components. I will collectively refer to the hardware and software designed to reduce emissions from the engine to the environment as the "Aftertreatment System."



23. DPFs decrease PM emissions by filtering PM or soot from the exhaust stream. DOCs are honeycomb shaped substrates coated with a catalyst material that are designed to promote the reduction of CO, HC, and portions of the soluble organic fraction of PM as the diesel exhaust passes through the structure. An SCR system reduces NO<sub>x</sub> emissions by chemically converting exhaust gas that contains NO<sub>x</sub> into nitrogen and water through the injection of diesel exhaust fluid, typically composed of urea. A NAC reduces NO<sub>x</sub> emissions by chemically adsorbing NO<sub>x</sub> from exhaust gas.

24. EGRs, DPFs, DOCs, SCR and NACs, are all “device[s] or element[s] of design installed on or in a motor vehicle or motor vehicle engine in compliance with [CAA] regulations” within the meaning of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B).

25. OEMs also install On-Board Diagnostics Systems (“OBD System”) on motor vehicles that monitor, detect, report, and record malfunctions of monitored Emissions-Related Elements of Design through the controller area network installed throughout the motor vehicle or motor vehicle engine. The OBD System monitors sensor inputs for malfunction or deterioration that could cause a vehicle to fail to comply with CAA emissions standards and may command the ECU to alter vehicle operation to correct malfunctions.

26. CAA regulations require that when the OBD System detects a malfunction of an emissions-related system or component, a malfunction indicator light, or “check engine light,” illuminates on the dashboard and the OBD System records the diagnostic trouble code. *See* 40 C.F.R. § 86.1806-05(b)-(e). The OBD System stores diagnostic trouble codes that service personnel can read in order to diagnose and repair a vehicle and government inspectors can download to verify a vehicle’s compliance with emissions standards.

27. The OBD System may also prompt a driver to correct a problem by altering vehicle performance, such as by putting the vehicle into “limp-home mode.” *See* 40 C.F.R. § 86.010-2. In limp-home mode, the ECU commands the engine to downgrade performance so that the driver is aware that there is a problem with the emission control system. *See, e.g.,* 40 C.F.R. § 86.004-25(b)(6)(ii) (requiring the vehicle performance to deteriorate to a point unacceptable for typical driving when diesel exhaust fluid replenishment is required). Thus, the OBD System, including hardware, parts, sensors, subassemblies, AECDs, and ECU software (calibrations), is a “device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with [CAA] regulations” within the meaning of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B).

28. OEMs set an engine’s operational parameters by installing pre-set software calibrations (“Certified Stock Calibrations”). These calibrations control all

aspects of vehicle and engine operation including combustion, performance, and operation of EGR and Aftertreatment Systems and are Emissions-Related Elements of Design.

29. The Certified Stock Calibrations for a particular engine operate together to minimize and/or control the formation and emission of pollutants and ensure the motor vehicle or motor vehicle engine can meet applicable emissions requirements in the CAA and regulations promulgated thereunder. COC applications disclose these calibrations for each vehicle model. The Certified Stock Calibrations are part of a motor vehicle's overall emissions control strategy because applicable regulations (40 C.F.R. § 86.1844-01(e)(2)) require that the fuel pump flow rate, fuel pressure, engine speed, EGR exhaust gas flow rate, and basic engine timing be included in the COC application.

30. The types of Certified Stock Calibrations include, but are not limited to:

- a. calibrations for parameters that affect the operation of the EGR System, including EGR flowrate and EGR cooler bypassing;
- b. calibrations for parameters that affect the operation of the Aftertreatment System (the DPF, DOC, SCR, and/or NAC);
- c. calibrations for parameters that affect engine combustion, performance, and operation, including air-fuel ratio, fuel injection timing, fuel

quantity, fuel injection pulse width, fuel injection pressure, fuel injection mass, multiple injection patterns, open loop/closed loop functionality and control, ignition control (spark timing), boost pressure, limiters (fuel, torque, smoke, etc.), manifold pressure, camshaft timing, electronic throttle control, engine air flow characteristics, mass air flow rate, turbocharger/supercharger air flow, and other parameters disclosed in the COC application, which are elements of the OEM's strategy to control the formation of pollutants in the engine; and

d. calibrations for parameters that affect OBD System detection, warning, and recording of malfunctions.

### **C. Information Requests**

31. Section 208(a) of the CAA, 42 U.S.C. § 7542(a), requires persons subject to Title II, Part A to maintain records and to provide information that EPA may reasonably require to determine whether the person has acted or is acting in compliance with the mobile source provisions of the CAA. 42 U.S.C. § 7542(a).

32. On February 15, 2018, EPA Region 5 issued a request for information to Defendant Diesel Ops under Section 208(a) of the CAA, 42 U.S.C. § 7542(a) ("First Information Request"). Exhibit 1 is a true and correct copy of the First Information Request. The First Information Request put Diesel Ops on notice that EPA was investigating whether its sale of motor vehicle parts and components complied with the CAA. In the First Information Request, EPA requested

information – including receipts or invoices – regarding each product and service that Diesel Ops manufactured, purchased, imported, distributed, offered for sale, provided and/or installed from January 1, 2015, to February 15, 2018, that, *inter alia*, “changes, affects, modifies, bypasses, or renders inoperative” various Emissions-Related Elements of Design. *Id.*

33. Exhibit 2, is a true and correct copy of the spreadsheet produced by Diesel Ops in response to Request No. 1 of the First Information Request, except for the first column, which was added to the spreadsheet to identify each product more easily. In Exhibit 2, Diesel Ops identifies products which it offered for sale, sold, and/or installed that:

a. “[c]hanges, affects, modifies, bypasses, or renders inoperative any emission control component, element of design, or emission related part or component including but not limited to, the DPF system, EGR system, catalyst system, OBD System, SCR, or sensors, signals, or records related to such systems;

b. [s]imulates the operation of any emission control component and/or related parts including but not limited to, the DPF system, EGR system, catalyst, OBD System, SCR, or sensors, signals, or records related to these systems (e.g a tuner); or

c. [c]an be programed to modify engine operating parameters, such as injection timing, fuel pressure, and/or pulse width, emission control parameters,

or OBD System functions including, but not limited to, those parameters sensed or controlled by the ECM.”

34. Exhibit 2 identifies over 1,000 Defeat Devices offered for sale by Diesel Ops. Based on its response, Diesel Ops clearly offered for sale, sold and/or installed Defeat Devices for use with motor vehicles “designed for transporting persons or property on a street or highway” in violation of the CAA. 42 U.S.C. § 7550(2). For example, in Exhibit 2, Diesel Ops reported selling the following products: Product #1 - “MBRD 4” CAT/DPF Delete Aluminized Pipe for **Ford** Powerstroke 6.7L 2011-2017” (emphasis added); Product #14 - “DPF-R 4.0 DPF Delete Programmer for **GM** Duramax 6.6LMM 2007.5-2010” (emphasis added); and Product #12 - “Sinister Diesel EGR Delete Kit For **Dodge** Cummins 6.7L 2010-2016.” (emphasis added). These products are designed for installation on Ford, GM, and Dodge vehicles. All of these manufacturers design their vehicle to transport persons or property on public streets and highways.

35. Exhibit 3 is a true and correct copy of the spreadsheet Diesel Ops produced in response to the First Information Request showing, by product type, its sales. The spreadsheet identifies more than [REDACTED] sales of Defeat Devices from January 1, 2015 through February 15, 2018.

36. On July 13, 2018, EPA issued a Finding of Violation advising Diesel Ops that its sale of Defeat Devices violates Section 203(a)(3)(A) and 203(a)(3)(B)

of the CAA (42 U.S.C. § 7522(a)(3)(A) and (B)). Exhibit 4 is a true and correct copy of the Finding of Violation issued to Diesel Ops.

37. On September 19, 2018, EPA Region 5 issued a request for information to Orion Diesel under Section 208(a) of the CAA, 42 U.S.C. § 7542(a) (“Second Information Request”). Exhibit 5 is a true and correct copy of the Second Information Request. In the Second Information Request, EPA requested information – including receipts and invoices – regarding each product and service that Orion manufactured, purchased, imported, distributed, offered for sale, provided and/or installed from January 1, 2016, to September 19, 2018, that, *inter alia*, “changes, affects, modifies, bypasses, or renders inoperative” various Emissions-Related Elements of Design.

38. Exhibit 6, is a true and correct copy of the spreadsheet produced by Orion Diesel in response to the Second Information Request, except for the first column, which was added to the spreadsheet to identify each product more easily. Orion Diesel identified [REDACTED] Defeat Device products that it manufactured and/or offered for sale for use with motor vehicles and reported selling over [REDACTED] Defeat Devices.

39. On December 19, 2018, EPA issued a Finding of Violation advising Orion Diesel that its sale of Defeat Devices violates Section 203(a)(3)(B) of the CAA

(42 U.S.C. § 7522(a)(3)(B)). Exhibit 7 is a true and correct copy of the Finding of Violation issued to Orion Diesel.

40. The responses to the First and Second Information Request confirm that Nicholas Piccolo, Jeffrey Detkowski, and Andrew Burry are the three members of Diesel Ops and Orion Diesel, and that Mr. Piccolo was the party primarily responsible for preparing the Corporate Defendants' responses to the Information Requests.

41. On March 14, 2019, EPA Region 5 issued an additional information request to both Diesel Ops LLC and Orion Diesel LLC (collectively the "Corporate Defendants"), requesting updated information on products installed, manufactured, purchased, and/or sold by the Corporate Defendants after the dates of the previous two requests (February 15, 2018, for Diesel Ops and September 19, 2018, for Orion Diesel) ("Third Information Request"). Exhibit 8 is a true and correct copy of the Third Information Request.

42. Exhibit 9 is a true and correct copy of the spreadsheet produced by Diesel Ops in response to the Third Information Request showing, by product type, its sales. The spreadsheet identifies approximately [REDACTED] sales of Defeat Devices by Diesel Ops from February 15, 2018 through March 12, 2019.

43. Exhibit 10 is a true and correct copy of the spreadsheet produced by Orion Diesel in response to the Third Information Request showing, by product type,



its sales of Defeat Devices. The spreadsheet identifies approximately [REDACTED] sales of Defeat Devices by Orion Diesel from September 18, 2018 through March 12, 2019.

44. After Diesel Ops claimed it was reducing its inventory, EPA Region 5 issued a fourth request for information to the Corporate Defendants on July 31, 2019 (“Fourth Information Request”). The Fourth Information Request repeated the request for receipts or invoices and requested an identification of products sold as part of Diesel Ops’ claimed inventory reduction. Exhibit 11 is a true and correct copy of the Fourth Information Request. The Corporate Defendants never formally responded to the Fourth Information Request but did provide some of the requested material to EPA.

45. On May 17, 2021, EPA Region 5 issued an information request to Nicholas Piccolo, requesting information on products and services provided, manufactured, purchased, and/or sold by him individually for the period of January 1, 2017 to May 15, 2021 (“Fifth Information Request”). Exhibit 12 is a true and correct copy of the Fifth Information Request. Mr. Piccolo confirmed receipt of the Fifth Information Request on May 25, 2021 and his responses were due on June 11, 2021. Mr. Piccolo never responded to the Fifth Information Request.

46. A majority of the Defeat Devices sold by the Corporate Defendants fall into the following three categories: EGR Delete Hardware Products, Aftertreatment System Delete Hardware Products, and Tunes. The sales of the specific products I

discuss below were used to calculate the statutory maximum penalty outlined in the Memorandum in Support of the Motion for Default (“Memorandum”). Those calculations are contained in Tables 1-4, which are included as Exhibit 2 to the Memorandum.

**D. EGR Delete Hardware Products.**

47. Some aftermarket hardware products physically replace, modify, bypass, render inoperative, facilitate deletion or partial deletion of, and/or interfere with components of the EGR System. These include, but are not limited to, exhaust manifolds that do not incorporate EGR ports designed for an engine with exhaust manifolds and EGR ports, plates that block the EGR System (also known as “blocker plates”), and hardware to force the throttle valve to remain fully open, which inhibits EGR flow (referred to as “throttle valve delete” equipment). The Complaint refers to these products collectively as “EGR Delete Hardware Products.”

48. In their responses to the First and Second Information Request, the Corporate Defendants reported offering for sale a number of EGR Delete Hardware Products. *See* Exhibits 2, 3, 6, 9 and 10, identifying over 140 different products containing a description that includes “EGR Delete.” The Corporate Defendants are well aware that these EGR Delete Hardware Products violate the CAA.

49. Again, the Corporate Defendants marketed and sold these Defeat Devices for installation on Ford, GM, and Dodge vehicles intended for use on

highways and public streets. Despite knowing these products are used on the above identified vehicles, the Defendants included the following notice in the description of products on their website, “this [product] can never be installed on any vehicle registered for use on highways or public streets The Corporate Defendants also warn that the installation of an EGR Delete Hardware Product requires Defeat Tuning (as defined below). This warning recognizes that the product requires a buyer to alter the vehicle’s ECU because the EGR, an Element of Design included on a COC, was removed in violation of the CAA. A true and correct screen capture from Diesel Ops’ website captured on March 3, 2020, is shown below with the cited language highlighted.

3/3/2020

Diesel Ops EGR Delete Kit w/High Flow Intake for Ford Powerstroke 6.4L 2008-2010

## Details

### Diesel Ops EGR Delete Kit w/High Flow Intake for Ford Powerstroke 6.4L 2008-2010

Diesel Ops EGR Delete Kit for Ford F-250/F-350 Super Duty 6.4L Powerstroke 2008-2010 w/ High Flow Intake Elbow

This Diesel Ops EGR Delete Kit is specially manufactured for your Ford Powerstroke engine-equipped F-250/F-350. The kit is built from durable/temperature-resistant billet aluminum. Deleting your EGR system can result in both quicker turbo spool and lower EGTs. It also eliminates exhaust recirculating through your intake manifold for reduced carbon deposits and increased reliability. The kit comes fully pressure-tested to make sure you're completely protected against leaks.

#### EGR Delete With High Flow Intake Elbow

This kit comes with an engineered high-flow intake elbow, which has been proven to increase horsepower even further. Available for your 2008, 2009, or 2010 Ford Super Duty F-250/F-350 6.4L Powerstroke. **WARNING, this 6.4L EGR Delete Kit can never be installed on any vehicle registered for use on highways or public streets.**

**\*\*Tuning is Required \*\***



50. The responses to the Information Requests show the Corporate Defendants sold primarily the following three EGR Delete Hardware Products:

a. ***“Diesel Ops EGR Delete Kit w/High Flow Intake for Ford Powerstroke 6.4L 2008-2010.”*** Diesel Ops described this product as an “EGR Delete Kit” specially manufactured for a Ford F-250/F-350 pick-up trucks equipped with a Powerstroke engine, which are vehicles intended for use on highways and public streets. EPA’s Engines and Vehicles Compliance Information System contain COCs for Ford F-250 and F-350 pick-up trucks manufactured from 2008-2010. As part of its description of the EGR Delete Kit, Diesel Ops claims, deleting your EGR system “eliminates exhaust recirculating through your intake manifold....” The description provided by the Corporate Defendants confirms that this hardware product physically replaces, modifies, bypasses, renders inoperative, facilitates deletion or partial deletion of, and/or interferes with components of the EGR System. In response to the First and Third Information Request, Diesel Ops admitted selling [REDACTED] of these products. *See* Exhibits 3 and 9.

In response to the Second Information Request, Orion Diesel admitted selling [REDACTED] similar products described as ***“Orion Diesel EGR Delete Kit w/High Flow Intake for Ford Powerstroke.”*** *See* Exhibits 6 and 10.

b. ***“Diesel Ops EGR & Cooler Delete Race Kit Stock Pyro for Ford Powerstroke 6.7L 2011-2014.”*** Diesel Ops described this product as an “EGR Delete

Kit” specially manufactured for PowerStroke engines manufactured from 2011-2014. EPA’s Engines and Vehicles Compliance Information System contain COCs for Ford F-250 and F-350 pick-up trucks containing PowerStroke engines manufactured from 2011-2014, which are vehicles intended for use on highways and public streets. This EGR Delete Kit is designed to remove the entire OEM EGR assembly, including the EGR Cooler, manifold pipes, coolant lines, and all EGR related electronics. The description provided by the Corporate Defendants confirms that this hardware product physically replaces, modifies, bypasses, renders inoperative, facilitates deletion or partial deletion of, and/or interferes with components of the EGR System. In response to the First and Third Information Request, Diesel Ops admitted selling [REDACTED] of these products. *See* Exhibits 3 and 9.

In response to the Second Information Request, Orion Diesel admitted selling [REDACTED] similar products described as “*Orion Diesel EGR & Cooler Delete Race Kit Stock Pyro for Ford Powerstroke.*” *See* Exhibits 6 and 10.

c. “*Diesel Ops EGR Delete Kit for Dodge Cummins 6.7L 2010-2016.*” Diesel Ops described this product as an “EGR Delete Kit” designed specifically for Dodge Ram pick-up trucks equipped with 6.7L Cummins diesel engine. EPA’s Engines and Vehicles Compliance Information System contain COCs for Dodge Ram pick-up trucks manufactured from 2007-2009, which are vehicles intended for use on highways and public streets. This EGR Delete Hardware Product

comes with a cover plate that eliminates exhaust gases from recirculating through the ERG system. Diesel Ops described this EGR Delete Hardware Product as a complete replacement for the OEM EGR system. The description provided by the Corporate Defendants confirms that this hardware product physically replaces, modifies, bypasses, renders inoperative, facilitates deletion or partial deletion of, and/or interferes with components of the EGR System. In response to the First and Third Information Request, Diesel Ops admitted selling [REDACTED] of these products. *See* Exhibits 3 and 9.

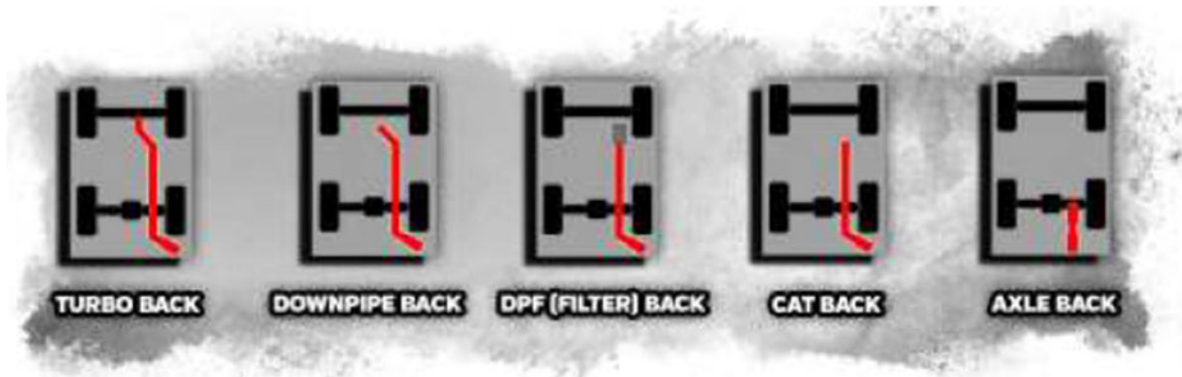
**E. Aftertreatment System Delete Hardware Products.**

51. Some aftermarket hardware products physically alter some or all components of a motor vehicle's Aftertreatment System by replacing, modifying, bypassing, rendering inoperative, facilitating deletion or partial deletion of, or interfering with essential physical elements of the DPF, DOC, SCR, or NAC. This often involves removing the Aftertreatment System installed by the OEM, and replacing it with a "straight pipe," "race pipe," or "delete pipe." The replacement hardware does not contain emission controls such as CAT, DPF, SCR, DOC, and/or NAC. The Complaint refers to these products collectively as "Aftertreatment System Delete Hardware Products."

52. Diesel Ops provides its customers with the following description of the various types of Aftertreatment Systems it sells. The descriptions show that Diesel

Ops is aware that selling Turbo Back, Downpipe Back, and DPF Back Aftertreatment Systems violate the CAA because they replace, modify, bypass, render inoperative, facilitate deletion or partial deletion of, or interfere with essential physical elements of the DPF, DOC, SCR, or NAC.

#### What Exhaust Option Is Right For Me?



#### TURBO BACK

Let's start with the Turbo back. This exhaust system starts from an outlet of the turbocharger, all the way to the exhaust tips. This is the least restrictive system and promotes the best flow of air, therefore the best performance. The Turbo back exhaust also produces the loudest, deepest, throatiest sound. The downside of this system is that it is the most labor intensive and the most expensive.

[SHOP TURBO BACK SYSTEMS](#)

#### DOWNPIPE BACK

Next is the downpipe back. There's not much of a difference from the Turbo back exhaust system. The only difference is that it doesn't include the downpipe because that's where the system starts. Depending on your setup, removing the downpipe may be more of a pain than some bargain for so this system allows you to skip that step. It may be slightly less expensive, but not by much. There isn't much of a sound difference compared to the Turbo back either. To some, it's not even a notable difference.

[SHOP DOWNPIPE BACK SYSTEMS](#)

#### CAT BACK

The Cat back is where the legality issues can no longer be a worry. This exhaust system runs from the outlet of the catalytic converter and goes all the way back to the tips. The Catback system is one of the more common aftermarket exhaust systems. It's relatively easy to install and cheaper than the previously mentioned exhaust systems. So you get distinct performance and sound upgrade without having to pay an arm and a leg.

[SHOP CAT BACK SYSTEMS](#)

#### DPF (FILTER) BACK

Depending on where your DPF is located, the DPF (or filter) back exhaust system can be more or less work and cost-effective. It's pretty similar to the Cat back system. It should be noted that this exhaust system is perfect for anyone who doesn't want to mess with emissions. This is a great, less expensive method compared to the previously mentioned. It is great for giving your diesel that upgraded look it needs and a slight sound difference.

[SHOP DPF BACK SYSTEMS](#)

#### AXLE BACK

Finally, we have the Axle back exhaust system. This system starts at the rear axle and runs to the tips. This has minimal sound and performance difference, although it is there. The Axle back exhaust system is the least expensive and least work involved for installation.

[SHOP AXLE BACK SYSTEMS](#)

<https://www.dieselpops.com/exhaust-options> (last viewed on October 31, 2018)



53. In their responses to the First and Second Information Request, the Corporate Defendants reported offering for sale a number of Aftertreatment System Delete Hardware Products. *See* Exhibit 2, 3, 6, 9 and 10, identifying over 160 products for sale containing a description that includes “Straight Pipe,” “Race Pipe” or “Delete Pipe”. The responses to the Information Requests show the Corporate Defendants sold primarily the following two Aftertreatment System Delete Hardware Products:

a. ***“Flo-Pro 4” DPF & Cat Race Delete Pipe Aluminized for Ford Powerstroke 6.4L 2008-2010.*** In Exhibit 3, Diesel Ops describes this product as replacing or “deleting” the OEM DPF and CAT (an abbreviation for a catalytic system referred to above as a DOCs, SCR, or NAC) on Ford pick-up trucks equipped with a 6.4L PowerStroke engine manufactured during 2008-2010. These Ford pick-up trucks are vehicles intended for use on highways and public streets. This product falls within Diesel Ops’ description of a Turbo Back system by removing both the DPF and CAT. EPA’s Engines and Vehicles Compliance Information System contain COCs for Ford pick-up trucks equipped with a 6.4L PowerStroke engine manufactured during 2008-2010. The description provided by the Corporate Defendants confirms that this hardware product physically replaces, modifies, bypasses, renders inoperative, facilitates deletion or partial deletion of, and/or interferes with components of the CAT and DPF Systems. In response to the First



and Third Information Request, Diesel Ops admitted selling [REDACTED] of these products. See Exhibits 3 and 9.

In response to the Second Information Request, Orion Diesel admitted selling [REDACTED] similar products described as “*Orion Diesel 4” DPF & CAT Aluminized Delete Pipe for Ford Powerstroke.*” See Exhibits 6 and 10.

b. “*MBRP 4” Cat/DPF Delete Aluminized Pipe for Ford Powerstroke 6.7L 2011-2017.*” From the name of the product, it is clear that this product replaces or “deletes” the OEM DPF and CAT on Ford pick-up trucks equipped with a 6.7L PowerStroke engine manufactured during 2011-2016. Again, this product falls within Diesel Ops’ description of a Turbo Back system by removing both the DPF and CAT. EPA’s Engines and Vehicles Compliance Information System contain COCs for Ford pick-up trucks equipped with a 6.7L PowerStroke engine manufactured during 2011-2016. These Ford pick-up trucks are also vehicles intended for use on highways and public streets. The description provided by the Corporate Defendants confirms that this hardware product physically replaces, modifies, bypasses, renders inoperative, facilitates deletion or partial deletion of, and/or interferes with components of the CAT and DPF Systems. In response to the First and Third Information Request, Diesel Ops admitted selling [REDACTED] of these products. See Exhibits 3 and 9.

In response to the Second Information Request, Orion Diesel admitted selling [REDACTED] similar products described as “*Orion Diesel 4” DPF & CAT Aluminized Delete Pipe for Ford Powerstroke.*” See Exhibits 6 and 10.

#### **F. Defeat Tuners and Tunes**

54. Other aftermarket products consist of software that is uploaded into a motor vehicle’s ECUs and replaces, modifies, bypasses, renders inoperative, facilitates deletion or partial deletion of, overwrites, and/or interferes with one or more of a motor vehicle’s or motor vehicle engine’s Certified Stock Calibrations. An individual piece of such software is commonly referred to as a “Tune,” derived from its intended purpose of “tuning” the vehicle’s performance. The Complaint refers to these Tunes as “Defeat Tunes.” A smartphone, laptop, or a handheld device called a “Tuner” can install and program Defeat Tunes.

55. A single Defeat Tune can alter, disable, bypass, delete and/or over-write multiple types of Certified Stock Calibrations. For example, a Tune that disables the EGR also typically alters OBD System-related calibrations to avoid triggering a diagnostic trouble code and resulting check engine light that would otherwise be triggered if an EGR is removed.

56. The Defeat Tunes discussed in the Complaint and sold by the Corporate Defendants delete, modify, or overwrite the following types of Certified Stock Calibrations.

a. *Certified Stock Calibrations relating to the EGR System.* This type of Defeat Tune can electronically disable the EGR System or alter EGR-related Certified Stock Calibrations such as EGR exhaust gas flow rate.

b. *Certified Stock Calibrations relating to Aftertreatment Systems: the DPF, DOC, SCR, or NAC.* This type of Defeat Tune can alter urea injection calibrations used to clean exhaust after combustion or DPF regeneration intervals, which are triggered when excessive exhaust soot overwhelms the DPF.

c. *Certified Stock Calibrations relating to engine combustion, performance and operation.* This type of Defeat Tune can alter, bypass, delete, and/or over-write the Certified Stock Calibrations for combustion parameters that affect emissions such as air-fuel ratio, fuel injection timing, fuel quantity, fuel injection pressure, and fuel injection pulse width.

d. *Certified Stock Calibrations relating to OBD System functions.* This type of Defeat Tune can prevent the generation and recording of diagnostic trouble codes and can prevent the OBD System from putting the vehicle into “limp-home mode” due to changes in Certified Stock Calibrations or removal of or changes to the EGR System or Aftertreatment System.

57. In their responses to the First and Second Information Request, the Corporate Defendants reported selling a number of Defeat Tunes and Tuners. The following warning was included in the description of these products on their website,

“[t]his product is capable of disabling emissions equipment.” Despite this warning, the Corporate Defendants installed these products on their customers’ vehicles driven to their business using highways and public streets. The screen shot below is from a Sale Order produced by Diesel Ops. *See* Exhibit 15 at page 7.

			P.O. No.
			13038
Item	Description	Ordered	Rate
DO-Service/Install...	Diesel Ops Service & Installation Hourly	3	
H&S-109003-R	H&S Performance Mini Maxx Race Tuner Programmer	1	
FLO-862	Flo-Pro 4" DPF & Cat Delete Race Pipe Aluminized for GM Duramax 6.6L LML 2011-2015	1	
OPSCash	Team OPS Cash		
	Local Pick-up and Installation 8/31/16; Paying upon installation.		
	Flo Pro Tracking # 702265835220		

58. The responses to the Information Requests show the Corporate Defendants sell primarily the following Defeat Tuners from two manufacturers – H&S Performance (H&S) and Gear Box Z Incorporated (“Gear Box Z”).

a. Diesel Ops describes the “***H&S Performance Mini Maxx Race Tuner Programmer***” as an exclusive product of H&S. A true and correct screen capture from Diesel Ops’ website showing the product description for an H&S Performance Mini Maxx Race Tuner Programmer is below.

<b>Details</b>	Additional Info	Fitment	SKUs	Return Policy	Reviews
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The Mini Maxx race tuner is part of the next generation of diesel downloaders from H&S; that offer everything a diesel owner could want, all in one high-tech unit. Exclusive to H&S; Performance, the Mini Maxx offers the flexibility of shift-on-the-fly tuning, as well as giving you the ability to monitor vital engine statistics at a glance. The monitor allows the user to view up to four parameters at one time. Choose from 20+ engine parameters including boost, transmission temp, intake temp, fuel rail pressure, exhaust gas temps, plus many more (varies depending on application). The Mini Maxx comes loaded with 4 power levels that can be changed at any time, on the fly, and is sure to leave the competition in the dust. When you are ready to step up to the next level of performance, step up to the Mini Maxx!

**DPF / EGR Removed Warning!**

This product is capable of disabling emissions equipment. If using DPF/EGR removed tuning, this high performance product is intended SOLELY for closed-course racing use and is not street legal in ANY state. This product cannot be used on any vehicles registered or certified for highway use. Please check your local, state, and federal laws before purchasing!

We cannot and will not answer any questions about fuel mileage gains! Due to this product being designed solely for racing or offroad application, ALL representatives are restricted to talk about fuel mileage. Please do NOT jeopardize their job and our company by asking about fuel mileage testing. You will NOT pass emissions testing with this product installed!!! Thank you for your cooperation.

**If using DPF removed tuning, this tuner requires the use of Race Exhaust! Do not leave the DPF on the vehicle if using DPF removed tuning!**

**Features**

- > Allows removal of the DPF system and ALL related sensors (nothing needs to go into the race exhaust)
- > Precisely tune engine with HP increases of 0-250HP (dependent on application, see below chart)
- > Speedometer recalibration for use of non-stock size tires or gearing
- > Enable / Disable factory "special features". High idle, fogs w/highs, seat belt chimes, driving lights, etc. (6.7L Cummins)
- > Automatic safety backdown. Controlled by EGT, Boost, Trans. Temp, and Coolant Temp
- > Remove / Adjust top speed limiter
- > Allows removal of the entire EGR system including cooler with no trouble codes
- > Turn off EGR without removing ANY parts
- > Read / Clear Diagnostic Trouble Codes
- > Custom Tunes are FREE to download. Check the section to see what is available for your product.
- > Internet updateable w/included SD Memory Card and USB Cable
- > Digital gauges to monitor 20+ parameters
- > Allows for use of aftermarket turbo kits with no trouble codes

The screen capture above shows how the Mini Maxx Race Tuner defeats DPF, EGR and other Elements of Design. Diesel Ops also affirmatively states that this product is capable of disabling emissions equipment.

On December 17, 2015, the Environmental Appeals Board entered a Consent Agreement between EPA and H&S (Docket No. CAA-HQ-2015-MSEB-8248) ("Consent Agreement"). *See* Exhibit 13. In the Consent Agreement, H&S stipulated that it manufactured Defeat Devices, including "Electronic Tuning Devices," which increased the performance of vehicles at the expense of emissions and to the detriment of human health and the environment in violation of the CAA. *See* Exhibit

13 at ¶25. The Consent Agreement identified the Mini Max Tuner as an Electronic Tuning Device. *See* Exhibit 13 at ¶11(b).

The description provided by the Corporate Defendants and the stipulations contained in the Consent Decree confirm that the Mini Max Tuner replaces, modifies, bypasses, renders inoperative, facilitates deletion or partial deletion of, and/or interferes with components of the EGR System. *See* Screen capture above and Exhibit 13 at ¶¶ 25 and 26. In response to the First and Third Information Request, Diesel Ops admitted selling [REDACTED] of these products. *See* Exhibits 3 and 9. In response to the Second Information Request, Orion Diesel admitted selling [REDACTED] of these products to Diesel Ops. *See* Exhibits 6 and 10.

b. Diesel Ops sold two Tuners manufactured by Gear Box Z – the ***“DPF-R 4.0 DPF Delete Programmer for Ford Powerstroke 6.4L 2008-2010”*** and ***“DPF-R 4.0 Plus DPF Delete Programmer for Ford Powerstroke 6.4L 2008-2010,”*** further identified by SKUs “GBZ-FD40” and “GBZ-FED40” (collectively the “Ford 4.0 Programmers”). Diesel Ops describes the Ford 4.0 Programmers as capable of temporarily deleting DPF for trucks equipped with DPF filters and goes on to state that this programmer “[r]eprograms the ECU for trouble free EGR/CAT/DPF delete.” *See* Exhibits 3. EPA’s Engines and Vehicles Compliance Information System contain COCs for Ford F-250 and F-350 pickup trucks equipped with Powerstroke 6.4L engines manufactured from 2008-2010, which are vehicles

intended for use on highways and public streets. In its product descriptions, Diesel Ops confirms that the Ford 4.0 Programmers are offered for sale on motor vehicles designed for transporting persons or property on a street or highway by stating, “we have taken extra care to ensure that this well rounded tune will be a good fit for any driving style.” *See* Exhibits 3.

The United States brought an action against Gear Box Z for selling and manufacturing products that violated the CAA in the United States District Court for the District of Arizona (No. CV-20-08003). On March 17, 2021, the Court issued an preliminary injunction enjoining Gear Box Z from “(1) selling, offering for sale, or transferring any products or components listed in Attachment A to this Order, or any materially similar products; and (2) selling, offering for sale, or transferring any intellectual property associated with the products listed in Attachment A to this Order, or any materially similar products.” The Ford Programmers are included on Attachment A to the Order. *See United States v. Gear Box Z Inc.*, 526 F. Supp. 3d 522, 530 (D. Ariz. 2021). On August 30, 2021, the District Court entered a Consent Decree prohibiting Gear Box Z from manufacturing, selling, offering to sell or install certain defeat device products, including the Ford 4.0 Programmers. *See United States v. Gear Box Z Inc.* (No. CV-20-08003) (Dk. No. 123). The description provided by the Corporate Defendants, the preliminary injunction entered against Gear Box Z, and the Consent Decree confirm that the Ford 4.0 Programmers replace,



modify, bypass, render inoperative, facilitate deletion or partial deletion of, and/or interfere with components of the EGR System. In response to the First and Third Information Request, Diesel Ops admitted selling [REDACTED] of these products. *See* Exhibits 3 and 9.

#### **G. Orion Diesel**

59. Diesel Ops website promoted Orion Diesel as a company that “spent a lot of time doing the research and development to make the products that they wanted to offer different than the others not only to set them apart but to make sure that they went above and beyond with a [sic] over engineered and well thought out products.” *See* Exhibit 14. Diesel Ops went on to state that Orion Diesel offered a wide range of products ranging from “EGR deletes, CAT/DPF deletes, and exhaust systems...”. *Id.*

60. The list of approximately 21 Defeat Device products that Orion Diesel admitted it manufactured or offered for sale in its response to the Second Information Request (Exhibit 6), is consistent with Diesel Ops’ description of Orion Diesel contained in Exhibit 14.

#### **H. Removing or Rendering Inoperative Emissions-Related Devices or Elements of Design**

61. In its response to the First Information Request, Diesel Ops admitted installing [REDACTED] of the Defeat Devices discussed above on customers’ vehicles. Diesel



Ops' installation of EGR Delete Hardware Products, Aftertreatment System Delete Hardware Products and Defeat Tunes removed or rendered inoperative devices or Emissions-Related Elements of Design that had been installed on or in motor vehicles or motor vehicle engines.

62. Diesel Ops knew it was installing EGR Delete Hardware Products, Aftertreatment System Delete Hardware Products, and Defeat Tunes on motor vehicles designed for transporting persons or property on a street or highway. And despite acknowledging that Defeat Devices “can never be installed on any vehicle registered for use on highways or public streets” on their website, a review of Sales Orders, however, establishes that Corporate Defendants were installing Defeat Devices on vehicles they described as “daily drivers,” *i.e.* motor vehicles designed for transporting persons or property on a street or highway. *See, e.g.*, Pages 1, 2, and 7 of Exhibit 15.

63. In its responses to the Third Information Request, Diesel Ops produced Sales Orders showing that it installed EGR Delete Hardware Products, Aftertreatment System Delete Hardware Products, and Defeat Tunes on or in motor vehicles and/or motor vehicle engines after the sale and delivery of the vehicle and/or engine to the ultimate purchaser in violation of the CAA. Exhibit 15 are true and correct copies of the redacted Sale Orders.

**I. Failure to Establish and Maintain Records and Respond Accurately and Completely to Requests for Information Pursuant to 42 U.S.C. § 7542**

64. In April 2021, as part of a separate investigation, EPA learned that Nicholas Piccolo was possibly selling Defeat Devices online and in his own name. EPA issued the Fifth Information Request to gather information regarding Defeat Devices sold by Mr. Piccolo in his own name.

65. During a June 15, 2021, telephone call with Mr. Piccolo, I emphasized the importance of receiving written responses to the Fifth Information Request. I also sent Mr. Piccolo follow-up emails on June 22, 2021, and July 8, 2021, requesting written response to the information request.

66. I am aware of that the Department of Justice, on behalf of EPA, sent Mr. Piccolo a letter on October 28, 2021, again asking for full and complete responses to the Fifth Information Request.

67. Despite multiple warnings concerning the consequences of failing to respond to the Fifth Information Request, EPA has not received Mr. Piccolo's written responses to the Fifth Information Request more than nine months after the deadline for responding.

**J. Penalty Assessment Considerations**

68. The Corporate Defendants produced information showing that they both operated out of the same building location. The building was sold to a third party on February 1, 2020. I have no reason to believe that the Corporate Defendants are still operating at that location.

69. I am aware that the Corporate Defendants refused to stop selling Defeat Devices during EPA's investigation and settlement discussions. The Corporate Defendants conducted a "Fire Sale" in which Defeat Devices were offered at discounted prices in early 2020, more than 18 months after receiving EPA's Finding of Violation, and Diesel Ops appears to have continued operating through its website into late 2021. It appears that the Diesel Ops website was shut down around the same time that Mr. Piccolo was advised that the Assistant Attorney General for the Environment and Natural Resources Division of the United States Department of Justice had approved the filing of a complaint against him and the Corporate Defendants (October 28, 2021).

70. I am also aware that in May 2020, the Corporate Defendants produced a Quickbooks file containing some financial information. The Defendants failed to produce enough information that EPA could use to evaluate the effect of any penalty on the Corporate Defendants' ability to continue business or determine the extent of their ongoing businesses or adequately explain inconsistencies in their financial

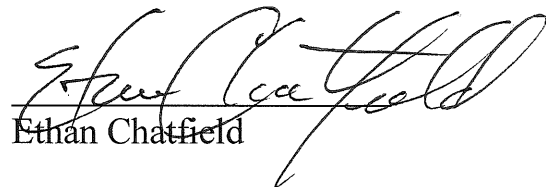
information. The Defendants also failed to produce enough information for EPA to evaluate their inability to pay a significant penalty.

71. The Defendants produced unsigned federal income tax returns for the years 2015-2018. Even though the returns were unsigned, they designated Mr. Piccolo as the individual with authority to sign the returns on behalf of the Corporate Defendants. The Defendants did not produce tax returns for any year after 2018.

72. In the more than 30 enforcement cases that I have worked on involving companies selling Defeat Devices, the size of the Corporate Defendants' operations and number of sales ranks them in the top three.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed on: May 31, 2022

  
Ethan Chatfield